

21 February, 2012

The Honorable Julius Genachowski
Chairman, Federal Communications Commission
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Re: IB Docket No. 11-109; NTIA Letter Regarding LightSquared Conditional Waiver

Dear Mr. Chairman,

On behalf of its geodetic community who relies on GPS as a primary tool for geoscience and hazard research, UNAVCO fully supports the conclusions of the NTIA in its letter to you of 14 February, 2012. We also believe that the actions proposed in the International Bureau's Public Notice DA 12-214 should be taken by the FCC in order to ensure that GPS is protected from harmful interference.

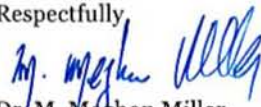
UNAVCO is a member-governed university consortium, an organization that is uniquely positioned to advance and support geodesy community science goals. In addition to over 100 US universities, UNAVCO supports more than 70 organizations as associate members that share UNAVCO's mission and benefit from its programs and services. The National Science Foundation (NSF) and NASA fund UNAVCO through cooperative agreements.

UNAVCO was formed in 1984 by earth science and atmospheric researchers who pioneered the usage of specialized Global Positioning System (GPS) hardware for high-precision studies. In the 27 years since, the UNAVCO Community has used GPS to make numerous discoveries regarding the nature of the solid earth and atmosphere, including the fundamental understanding of the processes of plate tectonics, earthquakes, volcanic eruptions and significant weather events. UNAVCO operates or supports approximately 2000 high-precision GPS monitoring stations in the U.S., including the 1100-station Plate Boundary Observatory (PBO), the geodetic component of the NSF's EarthScope Project in which \$100 million was invested for construction between 2003 – 2008. Taken together with subsequent operations and maintenance and other UNAVCO GPS projects to date, a taxpayer investment of over \$190,000,000 is at stake.

As detailed in the NTIA letter, results of tests conducted last summer clearly showed that all types of GPS devices were severely affected by LightSquared's initially proposed terrestrial MSS broadcasts, especially the newest state-of-the-art high-precision receivers that are in widespread use in our research. Further testing done this fall using only the "Lower 10" MHz MSS band at lower power conclusively demonstrated that the interference issue cannot be mitigated or resolved at this time.

We urge the FCC to vacate the Conditional Waiver Order granted to LightSquared on 26 January, 2011 and modify the 2004 license to prohibit any terrestrial broadcasts in the MSS band as recommended by the NTIA. While nationwide availability of Wireless Broadband Internet is an important goal for the future of our nation, its realization must not be accomplished at the expense of established infrastructure. Please do not jeopardize GPS signals used by UNAVCO and its community over 27 years for the advancement of knowledge and natural hazards research.

Respectfully,



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